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Ellen Garvey
Air Pollution Control Officer

August 25, 1997

Ms. Susan S. Simpson
Chief, Environmental Planning - North
California Department of Transportation
111 Grand Ave.
Oakland, CA 94623-0660

Subject: **Draft Environmental Impact Statement/Report for the Marin 101 HOV Gap Closure Project, Marin County**

Dear Ms. Simpson:

Bay Area Air Quality Management District (BAAQMD) staff have reviewed the Draft Environmental Impact Statement/Report (DEIS/R) for the Marin 101 HOV Gap Closure Project in Marin County. The DEIS/R examines the potential impacts to the environment of building high occupancy vehicle (HOV) lanes and auxiliary lanes in both directions of U.S. 101 as well as modifying the 101/I-580 Interchange, building a new interchange on I-580 near Irene Street in the City of San Rafael, and relocating West Francisco Boulevard, also in San Rafael. Because of funding constraints, only the construction of a southbound HOV lane and the relocation of West Francisco Boulevard are currently being proposed.

The DEIS/R predicts that emissions from peak-period project-related traffic will cause the State's 1-hour carbon monoxide (CO) standard to be exceeded at several locations in central San Rafael in the year 2000. The BAAQMD believes that while CO models often overpredict impacts, they do provide reliable indication of potential problem spots. No measures are offered to mitigate this potential impact because, according to Caltrans, "there are no mitigation measures that can reduce this exceedence to a level of insignificance." However, the California Environmental Quality Act (CEQA) requires discussion of mitigation measures that could minimize significant effects even, if they do not completely avoid such an effect or even substantially reduce it. According to the State's CEQA guidelines, "[T]his will leave agencies with the ability to select mitigation measures from the EIR to minimize effects even if individual measures do not make a substantial reduction. Several minor mitigation measures together could possibly make a substantial reduction in a significant effect."

BAAQMD staff have strong concerns about the environmental analysis conducted by Caltrans of impacts and of alternatives. The DEIS/R does not discuss the impacts that project-related traffic would have on regional and local air quality from increased emissions of reactive organic gases, nitrogen oxides and particulate matter. Such

information is necessary to adequately inform the public and decision makers of the project's environmental consequences even if the project is included in transportation plans found to be in conformity with the State Implementation Plan (as is the case with the Marin 10 1 HOV Gap Closure).

In its response to the Notice of Intent for the project, dated February 22, 1994, the U.S. Environmental Protection Agency (EPA) requested that Caltrans discuss proposals to implement congestion pricing in the corridor as a way to reduce solo drivers during rush hour. While we are aware of the political constraints on congestion pricing (also known as variable toll pricing), we are disappointed that this issue is not addressed in the DEIS/R, and request that it be discussed in the Final EIS/R. Variable toll pricing would cost a fraction of the proposed project, have greater traffic benefits, and have no negative environmental impacts. The savings resulting from this alternative could be used to fund additional ferry and bus service between Marin and neighboring counties, thus increasing transportation options for travelers in this corridor. We believe it is important for Caltrans to educate the public and decision makers about the advantages of congestion pricing, especially given the serious funding constraints for transportation projects in California, which is evidenced by the lack of sufficient funds for the full Gap Closure Project.

In its letter to Caltrans, the EPA also requested that the subject DEIS/R "rigorously explore and objectively evaluate" all reasonable alternatives. This was not done for Alternative 8, "Convert Existing Lanes to HOV." We disagree with Caltrans' unsupported statement that this alternative would worsen air quality. In the long term, Alternative 8 would be more beneficial for air quality than the preferred alternative because it would increase the person-carrying capacity of the corridor without increasing its vehicle-carrying capacity. Even though we recognize that, like congestion pricing, conversion of existing lanes to HOV-only traffic faces political obstacles, it is essential to the CEQA process that a more substantive discussion of this alternative be presented to the public,

The DEIS/R also does not discuss the indirect effects caused by the proposed project or explain how the transportation models used by Caltrans account for induced trips, both of which are analysis topics requested by the EPA. Recent study of HOV lanes suggest that they increase vehicle trips and vehicle miles traveled (VMT), resulting in greater air emissions. In "A Systems Level Approach: Travel, Emissions, and Consumer Benefits of Travel Demand Management Measures" (Institute of Transportation Studies, University of California, Davis; July 1996) researchers Caroline J. Rodier and Robert A. Johnston evaluated the performance of various travel demand management strategies in the Sacramento region. Rodier and Johnston concluded that HOV lanes were the only strategy of those studied that resulted in, VMT increase, no increase in transit use, a decrease in the walk and bike mode share and an increase in emissions of air pollutants.

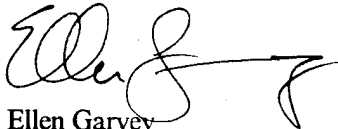
The above findings can be explained by the fact that new HOV lanes increase capacity for automobiles (including for single-occupant vehicles by freeing up space in mixed-use lanes). This encourages driving and reduces the incentive of people to shop and work closer to home, travel during non-peak hours, carpool, use transit or seek other alternatives. The research by Rodier and Johnston uses a "full feedback" model that considers the impacts to land use and trip generation of adding new capacity. The

California Air Resources Board and a special Transportation Research Board committee have concluded that most transportation models do not adequately address growth inducing effects of increasing highway capacity. Given the potential negative impacts of building new HOV lanes, we think it is essential that Caltrans discuss the indirect effects of HOV lanes in the Final EIS/R, and explain how the transportation models it used account for induced trips.

The idea that new roadway capacity-including the form of HOV lanes-induces travel is becoming widely accepted. For example, the "Sonoma/Marin Multi-Modal Transportation & Land Use Study," dated June 6, 1997 and prepared for the Sonoma County Transportation Authority and the Marin Countywide Planning Agency states on page 150 that "[c]urrently, there are more people who would like to take trips during commute periods than can. This 'pent-up' demand will tend to fill any additional highway capacity created by people shifting to transit or by new HOV lanes."

We are sensitive to the fact that there is local support for the Gap Closure Project. However, we believe that additional information needs to be made available to the public regarding the project's impacts on air quality and traffic flow after induced traffic is taken into account. We also think that Alternative 8 and a congestion pricing alternative need to be discussed in much greater detail, considering their likely cost-effectiveness, technical feasibility and long-term benefits to air quality. Please call Niko Letunic, Environmental Planner on my staff, at (415) 749-5170, if you have any questions regarding our comments.

Sincerely,



Ellen Garvey
Air Pollution Control Officer

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cc: BAAQMD Director Harold Brown, Jr.